Date: Wed, 26 Jan 94 10:08:41 PST

From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>

Errors-To: Ham-Space-Errors@UCSD.Edu

Reply-To: Ham-Space@UCSD.Edu

Precedence: Bulk

Subject: Ham-Space Digest V94 #10

To: Ham-Space

Ham-Space Digest Wed, 26 Jan 94 Volume 94 : Issue 10

Today's Topics:

Arsene

Daily IPS Report - 25 Jan 94 Low Pass filter vs Band Pass - Mode JD Status of polar-orbiting weather satellites

Send Replies or notes for publication to: <Ham-Space@UCSD.Edu>
Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Space Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

\_\_\_\_\_\_

Date: Mon, 24 Jan 1994 11:45:07 GMT

From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!torn!csd.unb.ca!upei.ca!

UPEI.CA!seeler@network.ucsd.edu

Subject: Arsene

To: ham-space@ucsd.edu

Hi - Its been a long time since I've seen anything about Arsene and was wondering if it has any funtions going at all at this time.

Tnx - Dave, VY2DCS

Internet : Seeler@upei.ca

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Date: 24 Jan 94 23:29:06 GMT

From: swrinde!sdd.hp.com!think.com!cass.ma02.bull.com!syd.bull.oz.au!brahman!tmx!

basser.cs.su.oz.au!metro!news.ci.com.au!eram!dave@network.ucsd.edu

Subject: Daily IPS Report - 25 Jan 94

To: ham-space@ucsd.edu

IPS RADIO AND SPACE SERVICES AUSTRALIA

Daily Solar And Geophysical Report

Issued at 2330 UT 24 January 1994

Summary for 24 January and Forecast up to 27 January

IPS Warning 02 was issued at 24/2200UT January and is current

for period January 27 - 29.

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### 1A. SOLAR SUMMARY

Activity: low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 129/082

1B. SOLAR FORECAST

25 January 26 January 27 January

Activity Low Low Low

Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 130/084

## 1C. SOLAR COMMENT

None.

\_\_\_\_\_

## 2A. MAGNETIC SUMMARY

Geomagnetic field at Learmonth : quiet

Estimated Indices : A K Observed A Index 23 January

Learmonth 02 2111 0001

Fredericksburg 02 07 Planetary 04 05

# 2B. MAGNETIC FORECAST

DATE Ap CONDITIONS

25 Jan 08 Quiet to unsettled. 26 Jan 08 Quiet to unsettled. 27 Jan 20 Unsettled to active.

### 2C. MAGNETIC COMMENT

Active periods expected during interval 27-29 Jan due to coronal hole.

# 3A. GLOBAL HF PROPAGATION SUMMARY LATITUDE BAND

DATE	LOW	MIDDLE	HIGH
24 Jan	normal	normal	normal

PCA Event : None.

3B. GLOBAL HF PROPAGATION FORECAST

### LATITUDE BAND

DATE	LOW	MIDDLE	HIGH
25 Jan	normal	normal	fair
26 Jan	normal	normal	fair
27 Jan	normal	fair	poor

3C. GLOBAL HF PROPAGATION COMMENT

Degraded comms expected at mid/high lats during interval 27-29 January.

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# 4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY MUFs at Sydney were about 15% above predicted monthly values

T index: 73

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST

DATE T-index MUFs

25 Jan 75 About 15% above predicted monthly values. 26 Jan 75 About 15% above predicted monthly values. 27 Jan 75 About 15% above predicted monthly values.

Predicted Monthly T Index for January is 30.

#### 4C. AUSTRALIAN REGION COMMENT

Degraded HF comms expected during Jan 27-29.

- -

Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3 dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

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Date: Mon, 24 Jan 1994 11:53:17 GMT

From: ucsnews!sol.ctr.columbia.edu!howland.reston.ans.net!torn!csd.unb.ca!upei.ca!

UPEI.CA!seeler@network.ucsd.edu

Subject: Low Pass filter vs Band Pass - Mode JD

To: ham-space@ucsd.edu

I have some desensing of my 440 rig on receive when the 2 meter rig fires up on Mode JD. This is not a MAJOR problem but I would like to resolve it. I suspect that it involves the 3rd harmonic of the 2 meter Transmitter.

The books suggest using a low pass or band pass filter - but they differ as to which would be best (opinion or operation differences?). I use the all

IC275 for Dx and local operations as well and suspect that the low pass filter would be a good start. The filter in the VHF/UHF Dx book appears to fit my needs - 35? db attenuation of the 2nd harmonic and 60 db attenuation of the 3rd - with minimal (?) insertion loss.

My questio is this - is the low pass filter the best way to solve this particular issue - and if so - does anyone have any suggestions as to any particular filter design / schematics - and comments as to how they/it works?

Thanks for considering this post.

Dave, VY2DCS

Internet: Seeler@upei.ca

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Date: Tue, 25 Jan 94 17:46:00 +0200

From: swrinde!cs.utexas.edu!howland.reston.ans.net!pipex!uknet!EU.net! news.eunet.fi!gate.compart.fi!compart!leo.wikholm@network.ucsd.edu

Subject: Status of polar-orbiting weather satellites

To: ham-space@ucsd.edu

## STATUS OF POLAR-ORBITING WEATHER SATELLITES

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No. 2, January 25, 1994

Station: Helsinki, +60.2N +25.1E

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NOAA 9 137,62 MHz normal
NOAA 10 137,50 MHz VHF conflict with NOAA 12?
NOAA 11 137,62 MHz normal
NOAA 12 137,50 MHz normal
Meteor 3-5 137,30 MHz not actice in North
Meteor 2-21 137,30 MHz not active in North

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Leo Wikholm

internet: leo.wikholm@compart.fi

fidonet : 2:220/861

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Date: 24 Jan 94 09:24:44 -0700

From: ucsnews!newshub.sdsu.edu!usc!howland.reston.ans.net!europa.eng.gtefsd.com!

news.umbc.edu!eff!news.kei.com!sol.ctr.columbia.edu!hamblin.math.byu.edu!

yvax.byu.edu!physc1.byu.edu!peterson@

To: ham-space@ucsd.edu

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References <2hd6ji$q5e@hpavla.lf.hp.com>,
<1994Jan17.145311.25166@ke4zv.atl.ga.us>, <CK0E5n.LG9@world.std.com>tr.colu
Subject : Re: Vacuum tubes in spacecraft?
In article <CK0E5n.LG9@world.std.com>, dts@world.std.com (Daniel T Senie) writes:
Coffman) writes:
>>Note also that program bloat can be traced almost completely to having
>>excess RAM available. Programs naturally expand to fill the space available,
>>witness Wordstar. It was a great fast program on a 48 kb Z-80 system, but
> common misconception. Wordstar NEVER fit in 48K. Sure it would run in a
> machine that had 48K, but every time you hit ^Y to delete a line, it
> had to swap in an overlay from disk to do the function, then swap back
> to the main code. When more memory is available, it is possible to
> improve performance.
>>now it's a multi-megabyte dog on a Windows PC with 8+ megs of RAM. And
>>that's 166 times more RAM to develop a bit error that can crash the system.
>>To a large degree, reliability is a function of parts count. The fewer
>>parts, the less to go wrong.
>>
> Actually in software the less is better philosopy does not always hold. To
> get program size smaller, one could always skip the bounds checking and input
> parameter checking. Fewer parts, but less reliability...
>
>>Garv
>>--
> --
> Daniel Senie
                           Internet:
                                        dts@world.std.com
> Daniel Senie Consulting
                                        n1jeb@world.std.com
> 508-365-5352
                           Compuserve: 74176,1347
```

Actually there are two other driving forces in the software bloat that are only allowed to operate because of the cheap RAM: 1) The demand for software that requires no thought or training. Some of this is good and some of it is useless "creeping featurism" (I have yet to understand why a top quality word processing package would require you to remove your hands from the keyboard to perform basic formatting functions). And 2) the trend toward using high-level languages for all software development. Most of those "lean and mean" packages of the past were written in optimized assembly code because RAM was tight. Now they don't have to put any effort into optimizing the code and are able to write using high-level languages and compilers that generate absolutely

horrendous code (from an efficiency standpoint). Yes, that allows them to meet the demands of (1) above more quickly but at a tremondous cost in storage space (just for grins look at the bloat in the distribution disks for ANY package over the last few years - things that used to be delivered on 2 360K floppies now require 4 to 6 1.44M floppies and add data compression to boot). Whether this whole trend is good or bad is a totally religious argument (hardware is cheap and features are nice versus why do I need so much hardware just to run a simple application).

However, any way you look at it my hat goes off to the programmers who are able to fit the entire control program for the Shuttle into the memory on those computers. I can guarantee they are not using the bloated high-level languages that you normally see in the PC world to do that.

Bryan Peterson, ki7td peterson@physc1.byu.edu

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